

Attention Ship Owners, Ship Operators and Navigation Officers

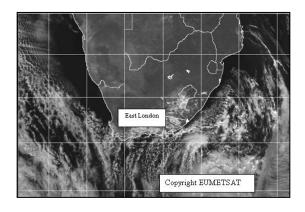
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This satellite image (right) was captured onboard EUMETSAT's geostationary satellite METEOSAT VII at 12h00 UTC on Tuesday 07 May 2002.

The cloud mass centred approximately 150 nautical miles south-east of East London represents a deep secondary vortex which developed rapidly overnight on the eastern Agulhas Bank. The primary vortex is clearly visible further offshore with its frontal band spiralling in from the southern Mozambique Channel.

Of all the numerical models available to the South African Weather Service, not one accurately analysed the secondary system. As a result, it was expected that both winds and waves would be under-forecast off South Africa's east coast. But how to quantify this?

Fortunately the **Sealand Voyager** (KHRK) provided invaluable observations at both 06 and 12h00 UTC as she journeyed southwards off the Transkei coast. Her 06h00 observation (including a 55-knot



southwesterly wind) helped analysts to gauge the depth of the new low. By 12h00 she was estimating the wind wave component at 10 m and the swell at 9 m. (An abnormal wave warning for the Agulhas Current had been issued the previous day and was still in force.)

Some comments and a heartfelt plea:

be KHRK was the only ship observation all day between Durban and Cape Town (a distance of some 800 nm). Although this is a major sea route, this scarcity of ship observations around the Southern African coast is by no means unusual. In terms of tanker traffic alone, the Cape Sea Route carries over 10% of the world's sea-borne oil trade.

- Land-based winds, particularly around this coast in winter are notoriously nonrepresentative of conditions offshore.
- Satellites are not the be all and end all. Cloud imagery is not always easy to quantify, and satellite-derived winds are by no means always available.

PLEASE - WE NEED YOUR 'OBS'.

As can be seen from the above example, VOS data can still have a marked impact on the accuracy of marine predictions – and thus maritime safety. \$\Psi\$